Society Reports.

THE PHILADELPHIA NEUROLOGICAL SOCIETY.

Stated Meeting, November 28, 1885.

The President, S. WEIR MITCHELL, M.D., in the chair.

Drs. CHARLES K. MILLS and JAMES HENDRIE LLOYD read "Notes on the Diagnosis of Spinal Tumors."

The subjects of general and differential diagnosis of spinal tumors were alone considered; that of local diagnosis—*i. e.*, of position of the growth at different levels of the spinal axis—was deferred for another paper. The conclusions were based on a study of fifty cases, three of which were personal observations, and the remainder were collected from American, English, French, and German literature. The general diagnosis—*i. e.*, the decision as to the spinal growth—can be made from a certain train of symptoms. These are of two classes: (1) those which are directly indicative of such a lesion; (2) those which are corroborative. The facts which point directly to a growth within the canal are: History of a constitutional or other cause, as of syphilis, cancer, tuberculosis, or traumatism. The onset and development are gradual and of a peculiar character. The first symptoms are those of an irritative lesion. This is probably due to the fact that tumors usually involve the membranes, as demonstrated by the cases studied. Hence, pain in the back or limbs is usually, but not always, present. The *sensory phenomena*, such as hyper-

æsthesia, anæsthesia, and paræsthesia, come on with more or less rapidity, with oscillating and irregular manifestations. *Motor symptoms*, such as paresis, spasm (tonic or clonic), contracture, tremor, ataxia, also manifest themselves in a similar oscillating manner. Exaggerated *reflexes* present themselves in most cases. *Trophic* and *vaso-motor disturbances* develop as the lesion progresses. These are such as wasting, ischæmia, œdema, and decubitus. *Visceral disorders*, such as paralysis of the bladder or rectum, or of their sphincters, and disorders of the heart and respiration, are, sooner or later, marked symptoms. Vomiting, gastric and intestinal disorders, are present in a limited number of cases. Mental disorders are present in only a very limited number of cases of tumors high in the spinal axis, but are not of diagnostic importance. Briefly stated, the phenomena which point with comparative certainty to the existence of spinal tumors, are symptoms of meningeal irritation gradually increasing, and symptoms of slow compression of the cord. The data in the cases studied were somewhat meagre as to *duration*. The usual duration is from six months to three years. It may be noted that fever was present at some stage in a considerable percentage of cases, but was so irregular as not to be of much diagnostic value.

The differential diagnosis of spinal tumors was considered in reference to the following affections: Spinal congestion, hemorrhage, meningitis, caries, traumatisms, sclerosis, aneurisms, neuritis, metallic and infectious disorders, and hysteria.

Spinal tumors are of constitutional or special origin, as syphilis, cancer, tuberculosis, etc.

Onset is gradual and irregular. Duration is comparatively long.

Progress is gradual, by irregular advances, toward a fatal termination.

Symptoms are inclined to be irregular, *i. e.*, unilateral or local; later, bilateral. Special symptoms, as paralysis, spasm, sensory and visceral disorders, are irregular as to time.

Decubitus and trophic changes are common late.

Reactions of degeneration are often present.

In *spinal congestion*, constitutional cause is not present.

Onset is usually sudden and after exposure. Duration is short, from a few days to four months.

Disease is stationary, then retrogression of symptoms toward recovery occurs.

Symptoms are more uniformly bilateral; motor and other symptoms develop about the same time.

Decubitus is rare.

Reactions of degeneration are rare.

In *spinal hemorrhages*, there is no special history, or a history of cardiac or vascular degeneration.

Onset is sudden.

Progress is more regular.

The first symptoms persist, and secondary degenerations follow, and differ according to extent and location of lesion, but are more likely to be uniformly bilateral.

In *meningitis*, the symptoms of localized compression are absent. The girdle symptom is absent. The affection is sometimes curable.

Reactions of degeneration are absent.

In *caries*, deformity is rarely absent. Rigidity of the muscles of back is a very important symptom.

In *traumatisms*, there is usually a history. The symptoms are those of caries, myelitis, meningitis, or combinations of these, according to character of case.

In *sclerosis*, the symptoms are usually of progressive systemic affections Compression symptoms are absent.

Duration is longer.

Progress is gradual, and more regular.

Aneurisms are only to be distinguished when extra-spinal, causing erosion and compression.

In *neuritis*, irregular sensory, motor, and reflex disturbances are present; compression symptoms and visceral disorders being absent. It is curable.

In *metallic and infectious disorders*, a history of definite causation is present. In metallic disorders there may be special characteristic signs, such as lead line, etc.

In *hysteria* a precedent hysterical history is usual.

Onset is often sudden. An emotional element is present. The symptoms are bilateral. Trophic changes are absent. No reactions of degeneration are present.

DR. E. N. BRUSH PRESENTED THE BRAIN AND SPINAL CORD REMOVED THAT DAY FROM A CASE OF GENERAL PARESIS.

The case was an interesting one in connection with the question of the association of the physical and mental symptoms of paresis. In this instance physical symptoms preceded the mental by some months. In the winter of 1883–84 the patient was discovered by his physician to be ataxic; symptoms of posterior spinal sclerosis increased, and in January were associated with some mental disturbance. The patient was irritable and forgetful, but in a general way complacent. He thought his business was unusually successful, and that he possessed remarkable ability to transact business affairs. He was easily confused, and in attempting to make a short journey alone over a route with which he was perfetly familiar lost his way, and found himself several miles from his home on the wrong train.

His mental disturbance became more aggravated, and at last it became necessary to place him in a hospital. He was first placed in a private institution in a neighboring State, but there—doubtless after a slight epileptiform seizure—became so much disturbed that his removal was requested. In August last he was admitted to the Insane Department of the Pennsylvania Hospital.

On admission his mind was markedly impaired. He was complacent, quietly submitted to suggestion, and was apparently demented. There were considerable disturbance of speech, marked tremor of tongue and lips and of upper extremities. Patellar tendon reflex abolished; pupils contracted to pin-points and not responsive to light; Argyll-Robertson symptom was present; gait ataxic.

During his time in the hospital the patient had three epileptiform seizures, such as are met with in cases of paresis. From these he readily recovered, but with increased impairment of mental and physical powers. After two hours of the seizures he was aphasic for some hours.

At eight o'clock on the morning of the day of his death, the patient had a slight vertiginous attack, followed by loss of power in arms and legs to a great degree, and disturbance of the power of co-ordination to such an extent that he could not, except after repeated trial, direct his hand to grasp an article held up before him. He protruded his tongue, opened and closed his eyes, and did other simple things upon direction; but to every thing responded "yes," and did not seem able to articulate any thing else.

At 3.30 P.M. the nurse's attention was attracted by the dusky appearance of his face, which had previously been pale.

The patient was seen at once by Dr. Brush, who found his face almost cyanotic, eyes injected, pupils closely contracted. In a few minutes he had a severe convulsion. At this time his temperature was 102⅖° F. The convulsion continued, and at 4.15 the temperature was 108½° F. Death occurred at 5.45. The temperature was then 107⅖°, and the body was bathed in perspiration. An hour after death the temperature of the body was 107° F. Post-mortem rigidity came on rapidly, and at eight o'clock was very pronounced.

Examination, sixteen hours after death: The conditions found were but briefly referred to, as the speaker intends to report this and some other cases more in detail to the Society.

The skull, especially in the temporal region, was quite thin; the dura was strongly adherent to the skull, and along the median fissure to the arachnoid or pia; the arachnoid was, as would be seen, thickened and opaque over the frontal and temporal convolutions, and along the Sylvian fissures; the pia in these locations was intimately connected with the cortex, and could not be separated without tearing it or the cortex cerebri. The sections made through the brain showed marked sclerosis; indeed, sections made through the anterior convolutions gave considerable resistance to the knife. The cord in the middle dorsal region was much injected.

Card from Dr. Morton.

Dr. Morton would say to his associate editors, collaborators, subscribers, and other friends, that with the present issue he will retire from the editorial management of the Journal. Accumulating literary and professional engagements render it impossible for him to do justice to the work; and he has therefore for the present transferred all the responsibilities of the Journal and its control to the gentleman who has so ably assisted him during the last year, and who now accepts the task with enthusiasm. The retiring editor would therefore bespeak for the new editor a continuation of that kindly consideration which has been his own only reward in connection with the Journal.

The present editor assumes his new duties with a full sense of the responsibilities they entail upon him. It will be his aim not only to sustain the enviable reputation the Journal has gained for itself, but to do all in his power to raise the standard of this publication, and to increase its usefulness among specialists and the medical world in general.

To this end, the following changes will be made:

1. *The Journal is to be published monthly.* This will help to lend renewed life to the Journal; it will ensure the early publication of original articles, and will enable the editor and contributors to report promptly on the most recent developments of neurological science. Each number is to consist of about sixty-four pages.

2. *Not more than one half the space of each number will be devoted to original articles.* Short papers will be quite in order; lengthy papers will be published in instalments.

3. *The department of "Clinical Cases"* will be constituted a regular feature of the Journal.

4. *Special attention will be given to the "Periscope."* The editor

recognizes and approves of the importance attached to such work by the American neurologist and general practitioner. All noteworthy publications will be promptly reviewed, and with such critical remarks as the individual reporter may see fit to make. Each review will be signed by the name or initials of the writer. It is particularly desirable that as many as possible should join hands in this work of review. The editor is deeply grateful to the five gentlemen who have done all the "Periscope" work during the past year. It is to relieve them of some of the work, and to enable them to contribute to the several subdivisions of the "Periscope," that he has asked others to co-operate with them.

5. *Book reviews* will be published as heretofore, though not necessarily in every number.

6. *The Proceedings of the New York and Philadelphia Neurological Societies* will be published as fully as the space of the JOURNAL will permit. Reports of other societies will be published occasionally, at the discretion of the editor.

7. The Editorial Department, as such, will be abolished. Under "Editorial Notes and Miscellany" information of general interest to the profession will be published from time to time.

CERTAIN minor changes in the arrangement of the JOURNAL will be detected by a close inspection of this number. The present number may be considered typical of those that are to follow in all but one respect—the space devoted to original articles. Dr. Seguin's article was in type before the changes in the editorial management had been effected. As stated above, articles of similar length will hereafter be published in instalments.